

targeting molecules, transcription molecules, nucleic acid degradation inhibitors, cell growth and integrity modulators, and mixtures thereof.

R E M A R K S

Applicants note that all amendments, cancellations, and additions of Claims presented herein are made without acquiescing to any of the Examiner's arguments or rejections, and solely for the purpose of expediting the patent application process in a manner consistent with the PTO's Patent Business Goals (PBG),¹ and without waiving the right to prosecute the cancelled claims (or similar claims) in the future.

In the office action dated 9/10/03, the Examiner made a number of rejections. The rejections are listed below in the order in which they are herein addressed.

- (1) Claims 34-36 are rejected under 35 U.S.C. 112, first paragraph, as allegedly lacking enablement;
- (2) Claims 34-36 are rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite; and
- (3) Claims 34-36 are rejected under 35 U.S.C. 101 as allegedly claiming the same invention as copending application serial number 10/002,802.

I. The Claims are Enabled

The Examiner has rejected Claims 34-36 are rejected under 35 U.S.C. 112, first paragraph, as allegedly lacking enablement. The Examiner states that the specification "does not reasonably provide enablement for a method of identifying a ligand of a receptor protein using any second nucleic acid encoding any protein." (Office Action, pg. 6). The applicants respectfully disagree. Nonetheless, as the claims have been cancelled for other reasons (see

¹ 65 Fed. Reg. 54603 (Sept., 8, 2000).

below), the Examiner's rejection is moot. New claims 38-49 are directed toward the detection of interactions between a receptor protein and a test protein.

The Examiner states that the present invention is enabled for methods where "said second nucleic acid encoding a selective marker operably linked to a cyclic AMP responsive promoter..." (Office Action, pg. 5). The applicants respectfully submit that the Examiner has mischaracterized the present invention. The present invention is directed towards methods of cell transfection, and in particular to the application of cells to nucleic acids which are immobilized on a surface and which then transfect the cells. The methods of the present invention as exemplified by pending Claims 38-49 are applicable for use with nucleic acid encoding any receptor and any protein that can be transfected using the "STEP" methods of the present invention. Numerous examples of receptor proteins, test proteins, and detection methods are known in the art. The present specification describes exemplary detection methods (e.g., cAMP response elements and the kinases and transcription factor pairs described in Tables 1 and 2), but is in no way limited to the use of these methods.

The Examiner has not provided evidence, as required, that skilled artisans would be unable to apply any of a wide variety of expressed proteins in the claimed methods. Applicants have demonstrated a new method for transfecting cells to detect interactions between proteins. Now that the applicants have demonstrated that such methods work, the Examiner, to sustain the rejection, must provide specific scientific evidence of why there would be uncertainty in applying this method across a wide range of proteins. For example, an invention to a new expression vector is not properly rejected by arguing that the supporting data only shows expression of one gene, unless there is specific, credible, scientific reasons that demonstrate that the expression vector is not functional with other coding sequences. Where the expression vector is suitable for use with any gene, such evidence does not exist and such a rejection is not sustainable. Likewise, in the present case, the Examiner has not provided any evidence demonstrating uncertainty for the use of the claimed transfection and detection methods. As such, the applicants respectfully request that the claims be passed to allowance.

The applicants further submit that, as the Examiner has indicated that claims to selectable markers operably linked to a cyclic AMP responsive promoter (see above) are enabled, that Claim 41, which is directed to such a detection system, be immediately passed to allowance.

II. The Claims are not Indefinite

The Examiner has rejected Claims 34-36 under 35 U.S.C. 112, second paragraph, as allegedly being indefinite (Office Action, pg. 9). The Applicants respectfully disagree. However, in order to further the business interests of the Applicants and while reserving the right to prosecute the original (or similar) claims in the future, the Applicants have cancelled claims 34-36 and added Claims 38-39. The new claims clearly state the metes and bounds of the presently claimed invention. As such, the applicants respectfully request that the claims be passed to allowance.

III. The Claims are not Claimed in Another Application

The Examiner has rejected Claims 34-36 under 35 U.S.C. 101 as allegedly claiming the same invention as copending application serial number 10/002,802. Claims 34-36 have been withdrawn from co-pending application 10/002,802 due to a restriction or election requirement. As such, the applicants respectfully request that the rejection be withdrawn.

CONCLUSION

If a telephone interview would aid in the prosecution of this application, the Examiner is encouraged to call the undersigned collect at (618) 218-6900.

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